MOTIVATION CONTRIBUTES TO THE PHYSICAL AND PSYCHOLOGICAL HEALTH OF RHEUMATOID ARTHRITIS PATIENTS, ABOVE AND BEYOND PHYSICAL ACTIVITY BEHAVIOUR

P. Rouse[1], J. Veldhuijzen van Zanten[1], G. Metsios[2], C.-A. Yu 1, N. Ntoumanis[1], G. Kitas[3], J.L. Duda[1].

[1]School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham;
[2]School of Sport, Performing Arts and Leisure, University of Wolverhampton, Wolverhampton;
[3]Clinical Research Unit, Dudley Group NHS Foundation Trust, Dudley, United Kingdom

Background: Patients with Rheumatoid Arthritis (RA) can participate in regular physical activity (PA) without disease aggravation and accrue health benefits, including enhanced physical and psychological health [1]. However, Self-determination Theory [2] proposes that the reasons why we participate in PA may determine the extent to which beneficial outcomes from PA can be accrued. Specifically, the benefits associated with PA participation will be maximised when one participates for autonomous reasons (i.e., enjoyment or personally valuing the benefits of PA) rather than for controlled reasons (i.e., because a health professional has told you to) [3].

Objectives: To test whether reasons for participating in PA (motivation) explains variability in reported physical function and psychological health (subjective vitality and depressive symptoms) in addition to that of self-reported moderate to vigorous physical activity (MVPA).

Methods: One hundred and six RA patients (Mage 54.5} 12.3 years, 68% female, BMI = 28.10}5.80 kg/m2) completed the following questionnaires before entering a PA intervention: International Physical Activity Questionnaire, Subjective Vitality Scale, Behavioural Regulation in Exercise Questionnaire-2, Hospital Anxiety and Depression Scales and Health Assessment Questionnaire. Multiple hierarchical regression analyses were conducted controlling for disease activity (C-reactive protein). MVPA was added in Step 1 of the regression and motivation added in Step 2.

Results: Analyses revealed that MVPA (b=0.29; *p*=0.04) significantly predicted subjective vitality [*F*(2,93)=4.37; *p*=0.02], explaining 9% of the variance. When motivation for participating in PA (b=0.27; *p*=0.006) was added, the model remained significant [*F*(3,92)=5.5; *p*=0.002] and explained an additional 7% of the variance. MVPA did not predict depressive symptoms [*F*(2,99)=2.8; *p*=0.07] but motivation was significantly and negatively related to reported depression [b= -0.30; *p*=0.01; *F*(3,98)=5.54; *p*=0.001], explaining 9% of the variance. MVPA did not significantly predict physical function [*F*(2,94)=1.65; *p*=0.20] but motivation was significant [b=0.2.60; *p*=0.009;] and explained 7% of the variance.

Conclusions: More autonomous motivations for participating in PA were associated with a range of improvements in both physical and psychological health outcomes. Future PA promotion interventions in RA patients could maximise treatment benefits, such as improvements in physical function and feelings of vitality as well as reductions in depressive symptoms. This could be achieved by increasing enjoyment of PA and awareness of the benefits associated with this important health behaviour.

References:[1] Metsios GS, Stavropoulos-Kalinoglou A, van Zanten JJCS, Treharne GJ, Panoulas VF, Douglas KMJ, et al. Rheumatoid arthritis, cardiovascular disease and physical exercise: a systematic review. Rheumatology 2008;47:239-48. [2] Deci EL, Ryan RM. The ’What’ and ’Why’ of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry 2000;11:227-68. [3] Ng JYY, Ntoumanis N, Thogersen-Ntoumani C, Deci EL, Ryan RM, Duda JL,

et al. Self-Determination Theory Applied to Health Contexts: A Meta-Analysis.

Perspectives on Psychological Science 2012;7:325-40.

Acknowledgements: Medical Research Council and NPRI